

SPC56xVTOP-A Vertical Calibration Top board

Data brief - production data

**Description**

Calibration is a process of optimizing a control algorithm to get the desired response from the system. A calibration tool is a combination of a hardware interface and a software application that enables the engineer to access the "calibration variables" in an ECU and change them.

The SPC56xVTOP-A Vertical Calibration Top board is designed to work with the SPC564AxxAVBx Vertical base board for the SPC564Ax line and moreover the board enables the use of new enhanced automotive calibration and debug tools on the SPC564Ax line of automotive microcontrollers, featuring a 32-bit bus interface.

Features

- 2 MByte static RAM organized as 512K words of 32 bits;
- 32-bit multiplexed Calibration bus configuration;
- Support for Nexus-based debug tools even if application PCB does not include Nexus connector;
- Nexus functionality with 16 Message Data Out (MDO) signals;
- Support for full-feature calibration tools, via availability of comprehensive set of device signals available on the connectors;
- Calibration connector ERNI 154819 connector optimized for calibration;
- High speed CAN transceiver with signals protection;
- ST A5973D step down monolithic power switching regulator.

1 Order codes

Table 1. Order codes

| Part number | Reference |
|--------------------|--|
| SPC56xVTOP-A/ | RAM/Debug Top Board for SPC564Ax Vertical Base boards. |
| SPC564A70AVB176 | Vertical base board for A-Line 2M in LQFP176 target package |
| SPC564A80AVB176 | Vertical base board with Advanced Interconnect socket for A-Line 4M in LQFP176 target package. |
| SPC564A80AVB324 | Vertical base board for A-Line 4M in BGA324 target package. |

2 Revision history

Table 2. Document revision history

| Date | Revision | Changes |
|-------------|----------|------------------|
| 05-Apr-2016 | 1 | Initial release. |